Preliminary Classification:

Proposed Class:

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Director of the U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Petri T. ELORANTA, Pauli SEPPINEN, Julius KOSKELA

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors."

For (title): METHOD AND DEVICE FOR DIGITAL-TO-RF CONVERSION

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date <u>November 20, 2003</u>, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number <u>EV303711657US</u>, addressed to: Mail Stop Patent Application, Director of the U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

Cathy Wilcox

(type or print pame of person mailing paper)

Signature of person hailing paper

WARNING:

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

1. Type f Application This new application is for a(n) (check one applicable item below) ☑ Original (nonprovisional) □ Design □ Plant WARNING: "Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application. WARNING: Do not use this transmittal for the filing of a provisional application. If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION. Divisional Continuation ☐ Continuation-in-part (C-I-P) 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121) NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be: (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or

- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
		The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3.	Papers	Enclosed
	(De 6 Pa 2 Pa	quired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 esign) Application ages of specification ages of claims neets of drawings
	WARNIN	G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).
	NOTE:	"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).
		(complete the following, if applicable)
		The enclosed drawing(s) are photograph(s). Three (3) sets of photographs and a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)" are attached. 37 C.F.R. § 1.84(b). The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b). formal informal
	B. Oth	ner Papers Enclosed
	1 Pa	ges of declaration and power of attorney ges of abstract ner (Title Page)
4.	Additio	nal papers enclosed
		Amendment to claims
		 □ Cancel in this application claimsbefore calculating the filing fee. (At least one original independent claim must be retained for filing purposes.) □ Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
		Preliminary Amendment
		Information Disclosure Statement (37 C.F.R. § 1.98)
		Form PTO-1449 (PTO/SB/08A and 08B)
		Citations

		Sub	omissi tainin	ion of g there	"Sec		Listir	ng," c				and/or amen eotide and/or	
		Aut Rep	horiza oresei	ntative		Attorne	ey(s)	to	Accept	and	Follow	Instructions	from
		Spe Oth		Comme	ents								
5.	Dec	clara	ation	or oat	h (in	cludin	g po	wer o	of attorne	y)			
NOT	E:	the plant in the according to the copy or, in	prior no all or fe lication signate ompani applica y of tha f a non	onprovision being file or a control of the control	ional n all led, a an in state ng file ation perso	application the inverse and a copulation ment requed. If the must be an under second	on contacts on the contact of the co	tained amed amed on tha that ame execute the that ame	a declarati in the prior cuted decla t it was si ion of the ri in the prior panied by a	on as re r applica ration fil igned) il aames of r applica copy of	quired, the tition, there led in the ps submitte f person(s) tion was fif the decision a prior a	application provides application being application (some matter of the copy of	r filed is ir in the showing nust be intors of then a 7 status
NOTE:		A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or join inventor. 37 C.F.R. § 1.63(a)(1)-(4).							name, st office				
NOT	E:	"The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).											
		□ Enclosed											
			Exec	uted b	У								
						(che	ck al	l app	licable bo	xes)			
			legal joint	invent	senta or o	r perso	n sho	wing). 37 C.F a propri reached.	etary i		.43. n behalf of in	ventor
												and the statem 13 below for	
		☑ Not Enclosed											
NOTE:		Where the filing is a completion in the U.S. of an International Application or where the comple the U.S. application contains subject matter in addition to the International Application, the appl may be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICACLAIMED.						olication D PAGE					
									son autho		under 37	C.F.R. § 1.41	(c) on

(The	dec	laration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
		☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inv	ente	orship Statement
WARNII	VG:	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inv	vento	orship for all the claims in this application are:
	The	e same.
		or
		OI .
		Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made, is submitted.
	_	
	ш	will be submitted
7. La	ngu	age
NOTE:	An requ	application including a signed oath or declaration may be filed in a language other than English. English translation of the non-English language application and the processing fee of \$130.00 uired by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may set by the Office. 37 C.F.R. § 1.52(d).
	X	English
		Non English
		The attached translation includes a statement that the translation is accurate.
		37 C.F.R. § 1.52(d).
8. As	sign	ment
	X	An assignment of the invention to Nokia Corporation
		☐ is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached. ☑ will follow.
NOTE:		an assignment is submitted with a new application, send two separate letters-one for the lication and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNII	VG:	A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 193, 1150 O.G. 62-64.
	Thi	s is a continuation divisional application and the assignment
do	cum	ent for the parent application 0 / was filed on
		·
		Reel Frame

Ce	ertified	copy(ies)	of applica	ation(s)			
Country				Appln.	Filed		
Co	ountry			Appln.	No.		Filed
Co	ountry			Appln.	No.		Filed
from w	/hich p	oriority is o	laimed				
		is (are) at will follow					
NOTE:			ication formir .F.R. § 1.55(clai	m for priority mus	st be referred to in the oath or
NOTE:	This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. § 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.						
10. Fe	e Cal	culation (37 C.F.R.	§ 1.16)			
A.	X	Regu	lar applica	tion			
*****				CLAIMS AS	FIL	ED	
Numbe	er filed	i		Number Extra		Rate	Basic Fee 37 C.F.R. § 1.16(a) \$770.00
Total (1.16(c))	5-20 =	0	×	\$18.00 =	-0-
•		Claims 1.16(b))	2-3 =	0	×	\$86.00 =	-0-
Multipl if any	e dep (37 C	endent cla .F.R. § 1.	aim(s), 16(d))		+	\$280.00	
		Amendme	ent deleting	ng extra claims g multiple-depe is not being pa	nde	ncies is enclos	sed.
NOTE:	amei	ndment, prio	r to the expii		eriod	set for response	nid or the claims canceled by by the Patent and Trademark
				Filing Fee Cald	culat	tion	\$
	В.		n applicati .00 – 37 C	•			
				Filing Fee Calo	ulat	tion	\$

9. Certified Copy

C	C. ☐ Plant application
	(\$510.00 - 37 C.F.R. § 1.16(g))
	Filing Fee Calculation \$
11. Smal	Il Entity Statement(s)
	Statement(s) that this is a filing by a small entity under 37 C.F.R. §§ 1.9 and 1.27 is no longer necessary.
WARNING	"Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).
WARNING:	"Small entity status must not be established when the person or persons signing the statement can unequivocally make the required self-certification." M.P.E.P., § 509.03, 6 th ed., rev. 2, July 1996 (emphasis added).
	(complete the following, if applicable)
	☐ Status as a small entity was claimed in prior application
	35 U.S.C. § □ 119(e),
	□ 120,
	□ 121,
	□ 365(c),
	and which status as a small entity is still proper and desired.
	□ A copy of the statement in the prior application is included.
	Filing Fee Calculation (50% of A, B, or C above)
	\$
NOTE:	Any excess of the full fee paid will be refunded if a small entity statement and a refund request are filed within 2 months of the date of timely payment of a full fee. The two-month period is not extendable under § 1.136. 37 C.F.R. § 1.28(a).
12. Requ	uest for International-Type Search (37 C.F.R. § 1.104(d))
	(complete, if applicable)
	Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

13. Fee Payment Being Made at This Time

X	Not	t Enclosed			
	X	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can subsequently.)	be paid		
	End	closed			
		Filing fee	\$		
		Recording assignment (\$40.00 – 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$		
		Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached.			
		(\$130.00 – 37 C.F.R. §§ 1.47 and 1.17(i))	\$		
		For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$		
		Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l))	\$		
		Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$		
NOTE:	for for for to 3 appli	C.F.R. § 1.21(I) establishes a fee for processing and retaining any applicati ailing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, as 17 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the belication, either the basic filing fee must be paid, or the processing and retent to be paid, within 1 year from the notification under § 53(f).	s well as the changes enefit of a prior U.S		
	Tot	al fees enclosed	\$		
14. Me	thoc	d of Payment of Fees			
	Atta	ached is a			
	Authorization is hereby made to charge the amount of \$				
		to Deposit Account No.			
		to Credit card as shown on the attached credit card informati form PTO-2038.	on authorization		
WARNIN	IG:: (Credit card information should not be included on this form as it may become	public.		
		arge any additional fees required by this paper or credit any o manner authorized above.	verpayment in		

15. Auth rization to Charge Additi nal Fees

WARNING:		If no fees are to be paid on filing, the following items should <u>not</u> be completed.							
WARNING:		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.							
		The Office is hereby authorized to charge, in the manner shown about following additional fees that may be required by this paper and durentire pendency of this application.							
			37 C.F.R. § 1.16(a), (f), or (g) (filing fees) 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims)						
pre time mig		entai peri ht be	additional fees for excess or multiple dependent claims not paid on filing or on later tion must only be paid or these claims canceled by amendment prior to the expiration of the od set for response by the P.T.O. in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it best not to authorize the P.T.O. to charge additional claim fees, except possibly when with amendments after final action.						
			37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)						
			37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))						
			37 C.F.R. § 1.17 (application processing fees)						
WARNIN	IG:	condits till of till of till subil petit	written request may be submitted in an application that is an authorization to treat any current or future reply, requiring a petition for an extension of time under this paragraph for imely submission, as incorporating a petition for extension of time for the appropriate length me. An authorization to charge all required fees, fees under § 1.17, or all required extension me fees will be treated as a constructive petition for an extension of time in any concurrent or re reply requiring a petition for an extension of time under this paragraph for its timely mission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive tion for an extension of time in any concurrent reply requiring a petition for an extension of under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).						
			37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))						

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the Notice of Allowance. 37 C.F.R. § 1.311(b).

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

16. Instructi ns as to Overpayment

Customer No. 004955

NOTE:	"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).								
		Credit Account NoRefund							
			11. Par						
Date: November 20, 2003			SIGNATURE OF PRACTITIONER						
Reg. N	o. 4	0,061							
Tel. No. (203) 261-1234		03) 261-1234	Kenneth Q. Lao						
			(type or print name of practitioner Ware, Fressola, Van Der Sluys & Adolphson LLP						
			755 Main Street P.O. (Correspondence) Address P.O. Box 224						

Monroe, CT 06468

	□ Incorporation by ref rence fadded pages							
	U.S cor PA	eck the following item if the application in this transmittal claims the benefit of prior 5. application(s) (including an international application entering the U.S. stage as a ntinuation, divisional or C-I-P application) and complete and attach the ADDED GES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR 5. APPLICATION(S) CLAIMED.)						
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed Number of pages added						
		Plus Added Pages for Papers Referred to in Item 4 Above						
		Number of pages added						
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.						
		Number of pages added						
		Plus "Assignment Cover Letter Accompanying New Application"						
		Number of pages added						
×	Sta	tement Where No Further Pages Added						
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.						
	X	This transmittal ends with this page.						